

CLAIMS

1. A car fall-prevention apparatus provided with a guide rail (2) installed vertically in the elevator shaft to guide the car up and down, a nearly tubular holding member (3) that is attached to the back surface of said guide rail, and a long plate-like support member (4) attached to said holding member to support the bottom part of said car, characterized in that
said holding member (3) is provided with a front wall (6) that is attached to the back surface of said guide rail and a back wall (9) that is arranged opposite said front wall, a locking hole (12) running in the axial direction of the guide rail that is formed in the end of said back wall, and stop plates (10, 11) that are also attached above and below said holding member, for the one part,
wherein said support member includes a base (4a) formed to be able to lock and be held between the projecting ends of said top and bottom stop plates, and a projecting part (17) that can lock into said locking hole is formed in the back edge of said base,
and a spindle (15), one end of which rotatably supports said support member from above and below via a slot (16) formed in the base of said support member, is attached to said holding member such that it can slide axially, and a spring member (22) that pulls said support member toward said holding member is also provided,
whereby from a standby position, with said support member located on said guide rail's back side and being pulled toward said holding member by the spring force of said spring member, said support member is adapted to be rotated forward while being pulled away (1) from the side of said holding member against the spring force of the spring member, and a forward end (4b) of the support member is positioned in front of the guide rail, while the base of the support member is held gripped by said top and bottom stop plates, said projecting part will also lock and be held in said locking hole.
2. The car fall-prevention apparatus described in Claim 1 characterized in that the forward end (4b) of said support member is formed approximately in an L shape, and a capture part (21), which captures the forward part of said guide rail (2) when the support member (4) is retracted along said slot (16) after said support member has been rotated toward the front from the back side of the guide rail around said spindle (15) so that the forward end is positioned in front of the guide rail, is also provided on the inner surface of said forward end.

3. The car fall prevention device described in Claim 1 or 2 characterized in that a handle (23) for operating said support member is provided on the outside surface of the base (4a) of said support member (4).

4. The car fall-prevention apparatus described in any of Claims 1 to 3 characterized in that a support base (19) that supports the bottom surface of the car is provided on the side edge of the forward end of said support member, and a reinforcing part (20) that reinforces said support base is also provided on the outside surface of said forward end.